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09/973,341	10/09/2001	Pradeep Bahl	211939	6203

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EXAMINER	
NGUYEN, JOSEPH D	
ART UNIT	**PAPER NUMBER**
2683	

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/973,341	Applicant(s) BAHL ET AL.	
	Examiner Joseph D Nguyen	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 4, 15, and 25 are objected to because of the following informalities:

Regarding claim 4, 15, and 25, in line 2 the abbreviation "IPSEC" needs to be defined. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5, 8-12, 16, 19-22, 26, 28-33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. (6,456,621).

Regarding claim 1, Wada et al. discloses a computer-readable medium having computer-executable instructions for performing steps for handling an address change of a mobile host communicating with a correspondent host (fig. 18) over an existing connection (abstract, fig. 6-25, col. 2 line 52 thru col. 9 line 5, col. 11 line 17 thru col. 13 line 46, col. 34 lines 12-57), the steps comprising:

a) deprecating, by the mobile host, an old address (detecting outdated address) of the mobile host (abstract, fig. 1-45, col. 3 line 43 thru col. 4 line 21, col. 34 lines 12-57);

a) sending, by the mobile host, an address change message to the correspondent host over a secured control channel (fig. 15-45, col. 2 line 52 thru col. 9 line 5, col. 13 lines 6-46, and col. 34 lines 12-57);

b) returning (responding), by the correspondent host upon receiving the address change message, an acknowledgment to the mobile host over the secured control channel (fig. 15-45, col. 2 line 52 thru col. 9 line 5, col. 13 lines 6-46, and col. 34 lines 12-57);

c) modifying, by the correspondent host, security filters and transport control parameters maintained by the correspondent host for the connection with the mobile host to use the new address of the mobile host (fig. 1-45, col. 2 line 52 thru col. 9 line 5, col. 25 lines 11-54, and col. 29 line 39 thru col. 34 line 57);

d) modifying, by the mobile host upon receiving the acknowledgment from the correspondent host, security filters (authenticate with security check) and transport control parameters maintained by the mobile host for the connection to use the new address of the mobile host (fig. 15-45, col. 2 line 52 thru col. 9 line 5, col. 25 lines 11-54, and col. 29 line 39 thru col. 34 line 57). However, Wada et al. does not specifically disclose modifying with security filters. But it would have been obvious to one ordinary skilled in the art that authenticate with security check between mobile host and correspondent host in the address translation is used with the modifying security filters.

Regarding claim 5, Wada et al. further discloses a computer-readable medium as in claim 1, wherein the steps of sending the address change message and modifying by the mobile host are performed by a mobility service of the mobile host (#115 fig. 15), and the steps of returning the acknowledgment and modifying by the correspondent host are performed by a mobility service of the correspondent host (fig. 15-45, col. 11 line 23 thru col. 14 line 48, col. 16 line 21 thru col. 18 line 55, and col. 31 line 56 thru col. 34 line 57).

Regarding claim 8, Wada et al. further discloses a computer-readable medium as in claim 1, wherein the connection between the mobile host and the correspondent host is established under the Transmission Control Protocol (TCP) (col. 11 lines 16-36).

Regarding claim 9, Wada et al. further discloses a computer-readable medium as in claim 1, wherein the connection between the mobile host and the correspondent host is established under the User Datagram Protocol (UDP) (#212 fig. 24a, and #188 fig. 45).

Regarding claim 10, Wada et al. further discloses a computer-readable medium as in claim 1, wherein the step of modifying by the correspondent host includes maintaining security filters and transport control parameters using the old address of the mobile host active during a pre-selected period of time (col. 34 lines 29-57).

Regarding claim 11, Wada further discloses a computer-readable medium as in claim 1, wherein the computer-executable instructions are part of a computer operating system (col. 12 lines 14-67).

Regarding claim 12 Wada et al. discloses a computer-readable medium having computer-executable instructions for performing steps by a mobile host communicating with a correspondent host over an existing connection to handle an address change of the mobile host from an old address to a new address (abstract, fig. 1-8, col. 2 line 52 thru col. 9 line 5, col. 11 line 17 thru col. 13 line 46, col. 34 lines 12-57), the steps comprising:

a) deprecating the old address (outdated address) (abstract, fig. 1-45, col. 3 line 43 thru col. 4 line 21, col. 34 lines 12-57);

b) sending an address change message to the correspondent host over a secured control channel (abstract, fig. 1-45, col. 2 line 52 thru col. 9 line 5, col. 13 lines 6-46, and col. 34 lines 12-57);

c) receiving an acknowledgment of receipt of the address change message from the correspondent host over the secured control channel (fig. 16-25, col. 2 line 52 thru col. 9 line 5, col. 13 lines 6-46, and col. 34 lines 12-57); and

d) modifying security filters and transport control parameters maintained by the mobile host for the connection to use the new address of the mobile host (fig. 25-45, col. 13 line 31 thru col. 14 line 39, col. 17 line 54 thru col. 18 line 50, and col. 19 lines 7-27, and col. 34 lines 29-57).

However, Wada et al. does not specifically disclose modifying with security filters. But it would have been obvious to one ordinary skilled in the art that authenticate with security check between mobile host and correspondent host in the address translation is used with the modifying security filters.

Regarding claim 16, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 19, this claim is rejected for the same reason as set forth in claim 8.

Regarding claim 20, this claim is rejected for the same reason as set forth in claim 9.

Regarding claim 21, this claim is rejected for the same reason as set forth in claim 11.

Regarding claim 22, Wada et al. discloses a computer-readable medium having computer-executable instructions for performing steps by a correspondent host communicating with a mobile host over an existing connection to handle an address change of the mobile host from an old address to a new address (abstract, fig. 1-8, col. 2 line 52 thru col. 9 line 5, col. 11 line 17 thru col. 13 line 46, col. 34 lines 12-57), the steps comprising:

a) receiving an address change message from the mobile host over a secured control channel (fig. 16-20, col. 13 lines 12-46);

b) returning an acknowledgment of receipt of the address change message to the mobile host over the secured control channel (fig. 20-45, col. 2 line 52 thru col. 9 line 5, col. 13 lines 6-46, and col. 34 lines 12-57);

modifying security filters and transport control parameters maintained by the correspondent host for the connection with the mobile host to use the new address of the mobile host (fig. 20-25, col. 20 line 44 thru col. 21 line 64, and col. 34 lines 29-57).

However, Wada et al. does not specifically disclose modifying with security filters. But it would have been obvious to one ordinary skilled in the art that authenticate with security check between mobile host and correspondent host in the address translation is used with the modifying security filters.

Regarding claim 26, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 29, this claim is rejected for the same reason as set forth in claim 8.

Regarding claim 30, this claim is rejected for the same reason as set forth in claim 9.

Regarding claim 31, this claim is rejected for the same reason as set forth in claim 10.

Regarding claim 32, this claim is rejected for the same reason as set forth in claim 11.

Regarding claim 33, Wada et al. discloses a computer-readable medium having computer-executable instructions for performing steps for handling an address change of a mobile host communicating with a correspondent host (application unit) over an existing connection (abstract, fig. 1-8, col. 2 line 52 thru col. 9 line 5, col. 11 line 17 thru col. 13 line 46, col. 34 lines 12-57), the steps comprising:

a) deprecating, by the mobile host, an old address (detecting outdated address) of the mobile host (abstract, fig. 1-45, col. 3 line 43 thru col. 4 line 21, col. 34 lines 12-57);

a) sending, by the mobile host, an address change message to the correspondent host over a secured control channel (fig. 1-45, col. 2 line 52 thru col. 9 line 5, col. 13 lines 6-46, and col. 34 lines 12-57);

b) returning (responding), by the correspondent host upon receiving the address change message, an acknowledgment to the mobile host over the secured control channel (fig. 24-45, col. 2 line 52 thru col. 9 line 5, col. 13 lines 6-46, and col. 34 lines 12-57);

c) modifying, by the correspondent host, security filters and transport control parameters maintained by the correspondent host for the connection with the mobile host to use the new address of the mobile host (fig. 1-45, col. 2 line 52 thru col. 9 line 5, col. 25 lines 11-54, and col. 34 lines 12-57);

d) modifying, by the mobile host upon receiving the acknowledgment from the correspondent host, security filters (authenticate with security check) and transport control parameters maintained by the mobile host for the connection to use the new address of the mobile host (fig. 25-45, col. 13 line 31 thru col. 14 line 39, col. 17 line 54 thru col. 18 line 50, and col. 19 lines 7-27, and col. 34 lines 29-57). However, Wada et al. does not specifically disclose modifying with security filters. But it would have been obvious to one ordinary skilled in the art that authenticate with security check between mobile host and correspondent host in the address translation is used with the modifying security filters.

Regarding claim 35, Wada et al. further discloses a computer-readable medium as in claim 2, wherein the secured control channel is through implementation of a security protocol (#141 fig. 25, col. 34 lines 29-57).

4. Claims 2-3, 7, 13-14, 18, 23-24, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. (6,456,621) in view of Borella et al. (6,697,354).

Regarding claim 2, Wada et al. further discloses a computer-readable medium as in claim 1, the step of deprecating. However, Wada et al. does not specifically disclose wherein the step of deprecating includes removing routing entries using the old address from a routing table of the mobile host and adding a tunneling entry based on the old and new addresses in the routing table, and wherein the step of sending transmits the address change message through the tunnel, and the step of returning transmits the acknowledgment through the tunnel.

Borella et al. teaches the step of deprecating includes removing routing entries using the old address from a routing table of the mobile host and adding a tunneling entry based on the old and new addresses in the routing table (fig. 16, col. 13 lines 1 thru col. 14 line 63), and wherein the step of sending transmits the address change message through the tunnel, and the step of returning transmits the acknowledgment through the tunnel (fig. 16, col. 20 lines 16-67). Therefore, it would have been obvious to one with ordinary skilled in the art at the time the invention was made to modify the Wada et al. system with the teaching of Borrella of the step of removing routing entries

and adding a tunneling to the transmits the acknowledgement in order to distribute network address translation for mobile network device when roaming.

Regarding claim 3, Wada et al. further discloses a computer-readable medium as in claim 2, wherein the secured control channel is through implementation of a security protocol (#141 fig. 25, col. 34 lines 29-57).

Regarding claim 7, Borella et al. further discloses a computer-readable medium as in claim 2, wherein the step of modifying by the mobile host includes removing the tunneling entry from the routing table (fig. 16, col. 20 lines 16-67). Therefore, it would have been obvious to one with ordinary skilled in the art at the time the invention was made to modify the Wada et al. system with the teaching of Borrella of the step of removing the tunneling entry from the routing table in order to allow the mobile host to roam to foreign subnets other than foreign subnet and register with other foreign agents using mobile IP.

Regarding claim 13, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 14, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 18, this claim is rejected for the same reason as set forth in claim 7.

Regarding claim 23, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 24, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 28, this claim is rejected for the same reason as set forth in claim 7.

Regarding claim 34, this claim is rejected for the same reason as set forth in claim 3.

5. Claims 4, 6, 15, 17, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. (6,456,621) in view of Borella et al. (6,697,354) and further in view of Mamros et al. (6,360,269).

Regarding claim 4, in the modify Wada et al. system, Wada et al. further discloses a computer-readable medium as in claim 3, wherein the security protocol (fig. 25, col. 26 lines 19-33). However, Wada et al. does not specifically disclose the security protocol is the IPSEC protocol.

Mamros et al. teaches the security protocol is the IPSEC protocol. (col. 5 lines 11-24). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Wada et al. system with the teaching of Mamros et al. of security protocol is the IPSEC protocol in order to protect communication link between transmitting and receiving of data from intruder.

Regarding claim 6, in the modify Wada et al., Wada et al. further discloses a computer-readable medium as in claim 5, wherein the mobility services of the mobile host and the correspondent host. However, Wada et al. does not specifically disclose

the mobility services of the mobile host and the correspondent host is OAKLEY protocol services.

Mamros et al. teaches the mobility services of the mobile host and the correspondent host is OAKLEY protocol services (abstract, fig. 2-4, col. 5 line 11 thru col. 8 line 45). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Wada et al. system with the teaching of Mamros et al. of OAKLEY protocol services in order to protect communication link between transmitting and receiving security data from intruder.

Regarding claim 15, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 25, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 27, this claim is rejected for the same reason as set forth in claim 6.

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

703 308-9051, (for formal communication intended for entry)

Or:

(703) 305-9509 (for informal or draft communications, please label "PROPOSED" OR "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA. Sixth floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Nguyen whose telephone number is (703) 605-1301. The examiner can normally be reached on 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Joseph Nguyen

May. 3, 2004

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600